

- a conveyor for conveying the product items in the chamber, said conveyer comprising:

- a conveyor belt forming an endless loop with a processing part and an idling part, the conveyor belt comprising a plurality of thermal conductive elements, each of the elements being adapted to obtain a first orientation in the processing part of the loop and adapted to obtain a second orientation in the idling part of the loop, the first orientation providing a substantially plan and continuous surface for supporting the product items across at least a number of the elements and wherein the second orientation of the elements provides a passage between the elements so as to allow the gas to flow between the elements;

- means for providing a thermal media to the chamber; and
- power driven means for advancing the conveyor belt,

wherein thermal processing of the product items is performed by a thermal convection from the elements to the product items.

25. (New) A thermal processing chamber according to claim 24, wherein the thermal media is a gas.

26. (New) A thermal processing chamber according to claim 24, wherein the second orientation is adjustable so that the size of the passage is adjustable whereby the amount of gas flowing between the elements can be controlled.

27. (New) A thermal processing chamber according to claim 24, wherein the thermal conductive elements are parallel arranged elongated beams having a wing formed cross sectional shape.

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28. (New) A thermal processing chamber according to claim 24, wherein the thermal processing of the product items is performed by a combination of a first thermal convection from the elements to the product items and a second thermal convection from the thermal media to the product items.

29. (New) A thermal processing chamber according to claim 24, wherein the elements are thermally influenced by a third thermal convection from the thermal media to the elements.

30. (New) A thermal processing chamber according to claim 29, wherein the thermal media is thermally influenced by a fourth thermal convection from the elements to the thermal media.

31. (New) A thermal processing chamber according to claim 24, wherein the thermal processing is freezing of the product items and wherein the thermal media is a cooling media.

32. (New) A thermal processing chamber according to claim 31, wherein the cooling media is selected from a group comprising:

- plain air,
- CO₂, and
- nitrogen.

33. (New) A thermal processing chamber according to claim 31, wherein the elements are cooled electrically.

34. (New) A thermal processing chamber according to claim 24, wherein the thermal processing is heating and wherein the thermal media is heated gas.

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35. (New) A thermal processing chamber according to claim 34, wherein the elements are heated by electricity.

36. (New) A thermal processing chamber according to claim 24, wherein the elements are made from a thermal conductive material.

37. (New) A thermal processing chamber according to claim 36, wherein the thermal conductivity of the material is between 30 and 230 W/(K*m) such as between 209 W/(K*m) and 229 W/(K*m).

38. (New) A thermal processing chamber according to claim 24, wherein the elements are made from aluminum.

39. (New) A thermal processing chamber according to claim 24, wherein the elements are coated with a material with a low surface friction.

40. (New) A thermal processing chamber according to claim 24, wherein the elements are adapted to rotate from the first orientation to the second orientation upon movement of the elements in the endless loop from the processing part to the idling part of the loop and wherein the elements are adapted to rotate back from the second orientation to the first orientation upon movement of the element in the endless loop from the idling part to the processing part of the loop.

41. (New) A thermal processing chamber according to claim 40, wherein the rotation is driven by gravity.

42. (New) A thermal processing chamber according to claim 24, further comprising an additional conveyor with a conveyor belt forming an endless loop, the conveyor belt having a partly open surface towards the thermal media.

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43. (New) A thermal processing chamber according to claim 24, wherein the product items are food items.

44. (New) A method of thermally processing product items in a thermal processing chamber provided with a thermal media, said method comprising the steps of:

- conveying the product items through the chamber on a plurality of thermally conductive elements;
- thermally processing the product by providing a thermal ~~convection~~ from the elements to the product items; and
- simultaneously providing a thermal convection from the thermal media to the product items.

45. (New) A method of processing product items in a thermal processing chamber according to any one of claims 24-43, said method comprising the steps of:

- conveying the product items through the chamber on a plurality of thermally conductive elements,
- thermally processing the product by providing a thermal ~~convection~~ from the elements to the product items, and
- simultaneously providing a thermal convection from thermal media to the product items.

REMARKS

Applicant submitted Annexes to this application consisting of 5 pages containing amendments to Claims 1-21, and an additional Claim 21. In a Notification from the United States patent and Trademark Office dated May 7, 2002, it stated that the Annexes were not entered because they were not a page for page substitution of

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